

Appl. No. 10/066,023
Amdt dated November 20, 2003
Reply to Office Action of June 20, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listings of Claims:

C²
Claims 1--20: (canceled)

Claim 21: (previously presented) A semiconductor package comprising:

- a semiconductor die having upper and lower principal surfaces;
- a metal heat sink in thermal contact with the lower principal surface of the die and in electrical contact with a first terminal on the lower principal surface of the die;
- a first sheet metal lead spanning the upper principal surface of the die, said first sheet metal lead being in electrical contact with a second terminal on the upper principal surface of the die; and
- a capsule encasing the die and at least a portion of the lead and the heat sink, opposite ends of the first sheet metal lead protruding from opposite sides of the capsule.

Claim 22: (previously presented) The semiconductor package of Claim 21 further comprising a second sheet metal lead spanning the upper surface of the die, said second sheet metal lead being in electrical contact with a third terminal on the upper principal surface of the die.

Claim 23: (previously presented) The semiconductor package of Claim 22 wherein said package is symmetrical about an axis, said axis being generally perpendicular to a longitudinal dimension of said sheet metal leads.

Claim 24: (previously presented) The semiconductor package of Claim 22 wherein said die comprises a MOSFET, said first terminal comprises a drain terminal, said second terminal comprises a source terminal, and said third terminal comprises a gate terminal.

Claim 25 (previously presented) A semiconductor package comprising a sandwich, said sandwich comprising a heat sink, a semiconductor die, and a symmetrical sheet metal

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c2 lead, said heat sink being bonded to said die and said die being bonded to said lead, said lead spanning a top surface of said die and having ends which protrude from opposite sides of said package, said sheet metal lead being symmetrical about an axis that is equidistant between the ends of the lead.

Claims 26-30: (canceled)

Claim 31: (new) The semiconductor package of Claim 21 wherein said metal heat sink includes a rim enclosed by said capsule.

Claim 32: (new) The semiconductor package of Claim 31 wherein said metal heat sink includes a notch located on an underside of said rim.

Claim 33: (new) The semiconductor package of Claim 21 wherein a plurality of holes are formed in a surface of said heat sink that is facing said lower principal surface of said die.

Claim 34: (new) The semiconductor package of Claim 33 wherein the plurality of holes are located in a portion of the surface of said heat sink that is not adjacent said lower principal surface of die.

Claim 35: (new) The semiconductor package of Claim 21 wherein a bottom of said heat sink protrudes from said capsule.

Claim 36: (new) The semiconductor package of Claim 21 wherein at least one lateral edge of said heat sink is exposed.